



United States
Department of
Agriculture

Forest Service

Pacific
Southwest
Region



Timber Sale Program Annual TSPIRS Report

Pacific Southwest Region
Fiscal Year 1993



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TIMBER SALE PROGRAM ANNUAL TSPIRS REPORT

FISCAL YEAR 1993

**USDA FOREST SERVICE
PACIFIC SOUTHWEST REGION**

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Many other people are involved in the TSPIRS reporting process. Although everyone cannot be listed here, their help was essential in completing this report.

PREFACE

The Pacific Southwest Region's report has been adapted directly from the national report to include only this Region's Forests. The national report is produced each year to provide Congress and the public with financial and economic information about the Forest Service's timber sale program. The format of the FY 1993 report has been substantially changed from prior years. In an effort to reduce the size of the report, some of the financial information detail previously included in the Statement of Timber Sale Revenues and Expenses by national forest (Appendix A) has been excluded. For those who wish to see it, this detailed information is still available upon request (see section on USDA Forest Service Contact, page XX).

Another significant change in the FY 1993 report involves the separation of national forest timber sale programs into program components. In 1992, the Forest Service adopted an ecological approach to the management of national forests and grasslands. This approach emphasizes blending the needs of people with management that sustains forest ecosystems. To keep pace with this management philosophy, national forests now classify their timber sales based on the primary purposes of the sale (see section on Timber Sale Program Components). The Timber Sale Program Information Reporting System, commonly referred to as TSPIRS, calculates a net revenue figure for each of the components. These figures are now included in this report by national forest (see Appendix E). This separation in program components also affects the way the below-cost timber sale issue is viewed on each forest.

EXECUTIVE SUMMARY

When reviewing the financial and economic performance of national forest timber sale programs, it is appropriate to consider several factors related to the objectives of the logging operations. This report attempts to put the performance of the FY 1993 program into perspective relative to overall forest management objectives. The following list highlights some of the important points discussed in the report:

The adoption of ecosystem management, which emphasizes the accomplishment of multiple-use management by blending the needs of people with environmental values, has and will continue to have a substantial effect on national forest timber sale programs. More and more timber sales are being designed primarily to enhance non-timber resources or achieve desired future ecological conditions. Ecosystem management represents an extension of the conservation movement which began in the late 1800's and has continually strengthened since then.

The harvest of 720 million board feet of timber from all national forests in Region 5 in FY 1993 produced \$157.7 million in gross revenue and \$55.9 million in net revenue (after subtracting operating expenses). Nearly \$43 million of the revenues were shared with the State and counties for use by local schools and highway departments.

The timber harvest also supported 8,670 jobs in local communities, which produced an estimated \$381.5 million in employment income. Approximately \$57.2 million was returned to the Treasury from Federal taxes paid on that income.

The present net value of the long-term economic effects expected as a result of the FY 1993 timber harvest are estimated at \$119.7 million.

To better monitor program activity, the FY 1993 program was separated into 3 components on each national forest: harvest primarily designed to provide wood products to meet the needs of society was categorized as "timber commodity" harvest and comprised 66 percent of the total program; harvest designed to achieve non-timber resource objectives and/or desired future ecological conditions made up 26 percent of the total program and was placed in

the "forest stewardship" component; and, the remaining 8 percent included harvest of products such as firewood for "personal use." In the future, the proportion of timber commodity harvest is expected to decline while the forest stewardship proportion increases.

The separation of the timber sale program into components has a direct bearing on how the below-cost timber sale issue is viewed. It is not appropriate to subject the forest stewardship harvest to profitability requirements because it produces non-timber resource benefits that cannot be measured in the financial statements. Therefore, below-cost timber sale programs are now identified using the timber commodity component net revenue only, instead of the total program net revenue as in past years. In FY 1993, 7 national forests operated timber commodity components at levels where expenses exceeded revenues or did not offer any timber commodity component. These forests produced 3 percent of the total timber commodity harvest on all national forests in Region 5.

Harvest in the forest stewardship component was used to achieve a number of non-timber resource objectives including endangered species habitat enhancement, general wildlife habitat improvement, scenic quality objectives, public safety objectives, ecosystem restoration, forest health maintenance, and more.

More than 80,000 permits for firewood, Christmas trees, and other forest products were issued through personal use programs on national forests. Based on the revenue earned and related expenses, the personal use component produced a net loss of \$8.0 million in FY 1993.

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CURRENT SITUATION

Today, trees are harvested from national forests for a wide variety of reasons. The harvest is used to achieve resource and ecological objectives outlined in forest plans; it provides a resource commodity (wood) that helps to meet the needs of society; and it helps to support and stabilize local economies.

Under ecosystem management, the ability to manage forest vegetation to achieve desired ecological conditions and sustain ecosystems into the future is key. In many cases, the harvest of trees provides a cost efficient tool necessary to meet that objective.

Other tools, such as controlled burning, are also used, but they are often not as cost efficient or may not be preferred from an environmental perspective. Since healthy young forests are less susceptible to insect and disease attacks and to fire, logging and reforestation offer an efficient way to improve and maintain forest health and sustain forest ecosystems.

Timber harvest from national forests helps to meet the demand for wood products by society. Historically most of the lumber produced in California remains in the state, but this amounts to less than half the total lumber used. Most of the additional lumber needed to meet consumer's demand comes from other states west of the Rockies (FRRAP 1988). Most of the exports of raw material come from private land since virtually all timber harvested from Federal lands is subject to primary processing (milling) in the United States. Public laws, including the Multiple-Use Sustained-Yield Act of 1960, direct that national forests should be used to provide a variety of resources and uses to the public, including wood production. The wood from national forests is used to produce a host of products including paper, fuel, construction lumber, furniture, and many more.

EMPLOYMENT GENERATED BY NATIONAL FOREST TIMBER HARVEST

The fiscal year (FY) 1993 timber sale program supported approximately 8,670 local community jobs which provided nearly \$381.5 million in employment related income. Approximately \$57.2 million were returned to the Federal treasury from income taxes paid on those wages.

Local community employment is generated when timber is harvested and milled into an intermediate or finished product. TSPIRS tracks the amount of local employment and income that is supported as a

result of the timber harvested from each national forest. Effects of timber sale programs on direct, indirect, and induced jobs at the local level are estimated along with the associated income and Federal income taxes. The table below displays the employment effects of the FY 1993 timber sale program from all national forests in Region 5.

Only effects on local economies are included in this analysis. There are additional jobs generated in regional and national economies as a result of other activities such as heavy equipment manufacturing or

petroleum refining. The total effect of the timber sale program on the national economy is greater than the sum of the local effects.

The employment estimates include both public and private sector jobs that are directly and indirectly generated as a result of activities and expenditures in the timber sale program. Those jobs that are induced as a result of increased local economic activity are also included. The estimates of income include personal income, such as salaries, and proprietary income, such as rent and return on capital investments. State and local income taxes are also generated in addition to the Federal taxes, but are not reported here.

EMPLOYMENT AND INCOME INFORMATION

For Fiscal Year Ending Sept. 30, 1993

Timber Related Jobs	8,670
Income	\$381,480,000
Federal Income Tax Generated	\$57,200,000

An average of 12.0 jobs and \$530 thousand in employment related income were supported for each million board feet (MMBF) harvested from national forests in FY 1993.

The jobs and income generated per MMBF vary from forest to forest based on two primary factors:

(1) the variation in the ratio of softwood sawtimber, softwood roundwood, hardwood sawtimber, and hardwood roundwood produced on the forest (higher proportions of sawtimber tend to support more jobs/MMBF)

(2) the value of the products sold (higher value products support more jobs)

Information about the number of jobs supported in each national forest is presented in Appendix D.

FINANCIAL INFORMATION

The FY 1993 harvest of 720 million board feet of timber from national forests in Region 5 produced \$157.7 million in gross revenue and, after expenses, \$55.9 million in net revenue.

The TSPIRS Statement of Timber Sale Revenues and Expenses presents information related to the program financial performance in an income statement format. The total FY 1993 revenues and expenses for national forests and the

regional office are reported on an accrual basis in the table on the next page.

Detailed information for each national forest and the Regional office is presented in Appendix A. Revenue, expense, and net revenue information by forest and program component is included in Appendix E.

Of the total revenues earned, \$42.95 million were returned to the State and local communities for use by school systems and highway departments. Payments to States (Act of May 23, 1908, 16 U.S.C. 500) are treated as a redistribution of income that occurs outside the agency's financial activity. These payments are not controllable by Forest Service managers. As in fiscal years 1991 and 1992, the FY 1993 appropriations act (P.L. 102-381, Section 315) established guaranteed levels of payments to States where timber sale revenues are affected by decisions related to management of the northern spotted owl. Of the 4 national forests affected

STATEMENT OF TIMBER SALE REVENUES AND EXPENSES
For the Fiscal Year Ended September 30, 1993
(in thousands of dollars, except as noted)

REVENUES ¹

Timber Sale Receipts	\$ 140,940
Purchaser Road Credits	7,156
Associated Charges	9,269
Interest and Penalties	<u>301</u>
Total Revenues	157,665

EXPENSES

Direct Expenses	
Timber Sale	79,691
Timber Program	<u>11,207</u>
Total Direct Expenses	90,898

Indirect Expenses	
Timber Sale	967
Timber Program	<u>9,852</u>
Total Indirect Expenses	10,819

Total Expenses	<u>101,718</u>
Revenue (before extraordinary losses)	55,948
Extraordinary Losses	<u>0</u>
Net Revenue	<u>55,948</u>
Total Timber Harvested (Millions of Board Feet)	<u>720</u>
Reclassified Assets	<u>\$ 0</u>

¹ As a result of revenues earned, \$42.95 million were returned to the State and counties through the 25 percent fund revenue sharing program for use by local schools and highway departments.

² Total timber harvest is presented for information purposes only.

by this provision, two provided payments greater than 100 percent of the timber sale revenues they earned in FY 1993.

COST AND REVENUE TRENDS

The table below displays a comparison of timber sale program financial performance for fiscal years 1989-93.

CONDENSED STATEMENTS OF TIMBER SALE REVENUES AND EXPENSES

For Fiscal Years Ended September 30, 1989-93
(in thousands of dollars ¹, except as noted)

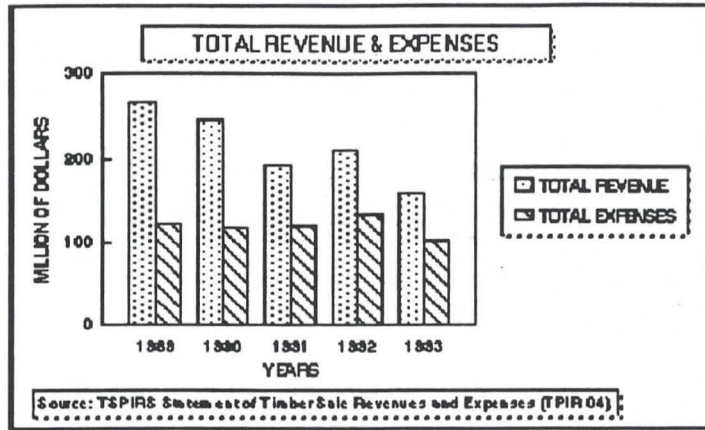
	<u>FY 1989</u>	<u>FY 1990</u>	<u>FY 1991</u>	<u>FY 1992</u>	<u>FY 1993</u>
Revenues	\$266,283	\$245,659	\$191,773	\$211,392	\$157,665
<i>Unit Value</i>	<u>134.49</u>	<u>144.76</u>	<u>147.18</u>	<u>183.98</u>	<u>218.98</u>
Expenses	122,627	116,204	119,972	132,674	101,718
<i>Unit Value</i>	<u>61.93</u>	<u>68.48</u>	<u>92.07</u>	<u>115.47</u>	<u>141.28</u>
Net Revenue	143,997	127,799	71,801	78,718	55,948
<i>Unit Value</i>	<u>72.73</u>	<u>75.31</u>	<u>55.10</u>	<u>68.51</u>	<u>77.71</u>
(before extraordinary losses)					
Extraordinary	---	---	---	53,323	---
Losses ²					
<i>Unit Value</i>	<u>---</u>	<u>---</u>	<u>---</u>	<u>46.41</u>	<u>---</u>
NET REVENUE	143,997	127,799	71,801	25,395	55,948
<i>Unit Value</i>	<u>72.73</u>	<u>75.31</u>	<u>55.10</u>	<u>22.10</u>	<u>77.71</u>
Timber Harvest (MMBF)	<u>1,980</u>	<u>1,697</u>	<u>1,303</u>	<u>1,149</u>	<u>720</u>

¹ The 1989-92 dollar amounts are not adjusted for inflation.

² Extraordinary losses were not calculated prior to FY 1992.

While the volume of trees harvested continued to decline in FY 1993, the prices paid for them have increased sharply, causing revenues to continue at levels above \$150 million. In FY 1993, the unit revenue increased to

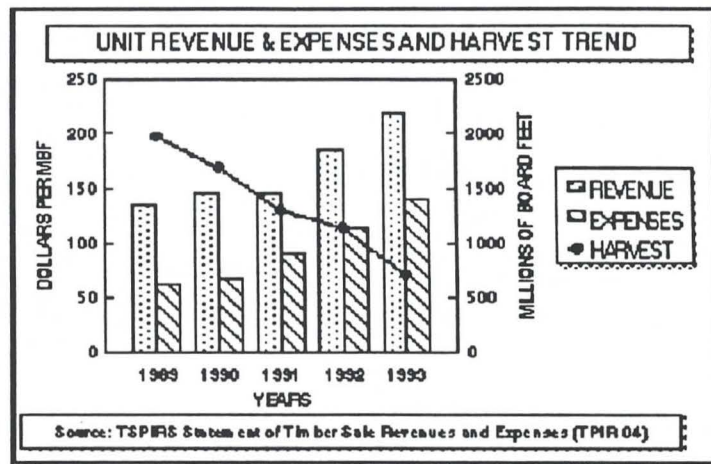
\$219.02 per MBF harvested. This upward trend is expected to continue into FY 1994 since much of the volume sold at higher prices in 1993 has not been logged yet.



Total expenses for the program are beginning to show a slight decline but less than harvest volume reductions. While the agency has striven to reduce its work-force consistent with the size of the timber program, the lag between

reduction in program level and reduction in workforce, threatened and endangered species protection and coordination with other resource programs, accounting changes, and diseconomies of scale have continued to increase costs. The charts display the total revenue and cost trends and the unit revenue and cost trends for a 5-year period.

The cost of additional environmental and resource coordination are generally reflected in the timber sale preparation cost group. While the costs for timber sale field work and contract preparation have declined, those for analysis and documentation, other resource support, and appeals and litigation have increased over FY 1992. The following table on the next page displays these relationships.



REGIONWIDE SALE PREPARATION EXPENSES

For the Fiscal Years Ended September 30, 1992-93
(in thousands of dollars, except as noted)

	<u>FY 1992</u>		<u>FY 1993</u>	
	% of		% of	
	<u>Expenses</u>	<u>Total</u>	<u>Expenses</u>	<u>Total</u>
Analysis and Documentation ¹	2,740	5.4	1,800	5.9
Other Resource Support ¹	17,397	34.3	10,775	35.4
Appeals and Litigation ^{1 2}	566	1.1	483	1.6
Field Work and Contract Preparation	<u>30,024</u>	<u>59.2</u>	<u>17,343</u>	<u>57.1</u>
Total Timber Sale Preparation	<u>\$ 50,727</u>	<u>100.0</u>	<u>30,401</u>	<u>100.0</u>

¹ See Glossary for definitions of these work activities

² The FY 1992 Timber Sale Program Annual Report estimated that approximately \$53 million had been invested in sales that are delayed as a result of pending appeals or litigation (including investments in analysis and documentation, other resource support, and field work and contract preparation). Many of these sales continued to be delayed in FY 1993, particularly those associated with litigation related to northern spotted owl management. Final decisions on this issue are pending and may be made in FY 1994. If so, the forests involved will likely include associated reclassified asset or extraordinary loss calculation in the FY 1994 TSPIRS financial statements.

Adjustments to accounting procedures have had the effect of increasing the total expenses displayed for FY 1993. As an example, it is estimated that the shift to growing stock inventory as the divisor for the growth activity pool has resulted in an increase of 2-3 percent in the total expenses displayed on the income statement. In addition, economies of scale have a significant effect on unit costs. As the timber program declines on a forest, savings can be realized through the reduction of variable

costs. However, fixed costs for items such as rents and utilities will continue until offices can be moved or consolidated.

NON-CONVERTIBLE PRODUCTS

Along with timber products, the Forest Service also sells other forest products such as mushrooms, tree boughs, and ferns that cannot be converted into board feet, the standard measure for timber. Demand for these products has increased sharply over the recent past, which has given rise to concerns about the way these resources should be managed.

The Statement of Timber Sale Revenues and Expenses includes the revenue and expenses associated with the sale of these products. This concerns some Forest Service managers, because it may contribute to financial losses in their timber sale programs. As a result, the Forest Service is currently reviewing its policies regarding these special forest products. The possibility of providing a separate accounting of revenue and expenses through TSPIRS is also being examined.

CHANGES TO TSPIRS IN FY 1993

Along with changes in the reporting format for TSPIRS information (see Preface, page ii), accounting changes were made based on recommendations in audits of the system by the U.S. Department of Agriculture Office of Inspector General (OIG). In their audit of the FY 1992 TSPIRS report, OIG suggested that costs included in the growth activity cost pool be amortized using an estimate of timber inventory opposed to an estimate of the average harvest volume over the rotation period (AHVORP). This suggestion was implemented in FY 1993. The volume of growing stock inventory as reported in forest plans for suitable timber lands is now the basis for the amortization formula. The growing stock volume will be updated each year for growth, mortality, and removals (harvest) and then replaced with new information as suitable timber lands are periodically re-inventoried. Based on another OIG suggestion, the expenditures for regional office and Washington office transportation planning are now displayed as annual expenses. Previously, they were included as capitalized investments in the road prism asset pool.

In FY 1992, extraordinary losses were calculated and reported as expenses for the first time. However, OIG noted a concern that some of these expenses were

incorrectly calculated and other should be displayed as "reclassified assets" since the assets, such as roads, still exist (even though they will no longer be used for logging purposes).

ECONOMIC ACCOUNT

The present net value of the long-term economic consequences expected as a result of the FY 1993 timber harvest are estimated at \$120 million.

Because the harvest of trees is used on national forests to help sustain ecosystems and achieve multiple resource objectives, there are several economic consequences of the harvest that are not directly related to the timber resource. The

long-term costs and benefits associated with these effects are monitored through the TSPIRS Economic Account, along with the long-term cost and benefits of timber production.

Economic Value is measured through the use of a present net value (PNV) calculation. Future costs and benefits that are expected as a result of the FY 1993 harvest are discounted to the base year (1993) using a 4-percent discount rate and added to the present costs and benefits. The total PNV calculation for all national forests in Region 5 combined is displayed in the table on the next page. PNV information for each national forest is included in Appendix C.

The effects of logging on non-timber resources, including recreation, wildlife, fish, grazing (domestic livestock), and water, are estimated and included in the PNV calculation where a monetary value can be determined or assigned to the effect. Some effects cannot be measured and are excluded from the PNV calculation. The "PNV for Timber Only" subtotal includes the costs and benefits associated with just the timber resource.

Analytical techniques used to estimate resource effects for the economic account are similar to those used in developing forest plans. The resource production changes that are expected to result from the FY 1993 harvest have been quantified and assigned monetary values where possible. Estimates of investment and operating costs are also included in the PNV calculation.

ECONOMIC ACCOUNT
For the Fiscal Year 1993 Timber Harvest
(in thousands of FY 1993 dollars)

PRESENT VALUE OF BENEFITS

Positive Effects		
Timber	\$ 279,066	
Other Resources	<u>13,618</u>	
Total Positive Effects		\$292,684
Negative Effects		
Timber	0	
Other Resources	<u>0</u>	
Total Negative Effects		<u>0</u>

TOTAL PRESENT BENEFITS (Positive less Negative) \$292,684

PRESENT VALUE OF COSTS

Timber	149,974	
Other Resources	1,998	
Roads	<u>20,988</u>	
Total Present Value of Costs		<u>172,960</u>

Present Net Value (Benefits less Costs)

PNV for Timber Only (includes road costs) 108,104

TOTAL PNV ALL RESOURCES(including timber) \$ 119,724

If there are instances where timber harvest would increase the production of a particular resource, such as recreation opportunities, but there is no demand for or means of using that additional resource, no value is assigned. The PNV calculation involves complex resource analysis at the forest level and is based on the best information available to Forest Service personnel.

Current and anticipated costs and timber benefits associated with the FY 1993 timber harvest are included in the calculation of the "PNV for Timber Only." The timber benefits are based on market-related transactions, while non-timber resource benefits are generally based on simulated markets. The economic value of non-timber resource effects is estimated through the use of non-market analysis techniques.

Where investments are made in basic infrastructure, such as arterial or collector roads, the economic account may include the total cost of the development, but it does not include all the associated benefits. Benefits associated with future timber sales from surrounding areas that may use the same facilities are not included in the analysis.

TIMBER SALE PROGRAM COMPONENTS

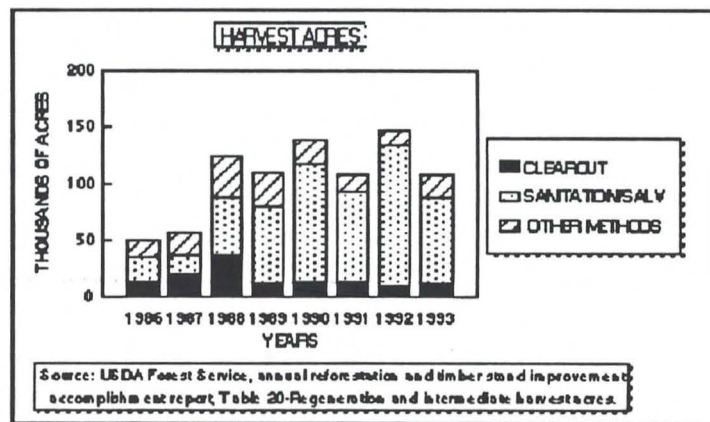
Below-cost timber sales often provide beneficial effects that cannot be measured on the profit and loss scale.

The issue of national forest below-cost timber sales has been the subject of substantial debate for the past several years. However, events of the recent past have changed the way the issue is viewed. On June 4, 1992, the Forest Service

officially adopted an ecosystem approach to its management of national forests. Ecosystem management principles provide the basis for sustaining terrestrial and aquatic ecosystems at multiple scales and guide national forest personnel in their efforts to meet the resource production objectives outlined in forest plans.

The concepts and principles of ecosystem management have evolved over a number of years and, along with that evolution, logging and reforestation techniques have changed. One of the ways that the Region is moving towards Ecosystem Management is by changing the design of timber sales. Timber sales are being designed to be consistent with and to help achieve future desired ecological conditions. In the past few years, the mix of silvicultural treatments on national forests has moved steadily away from clearcutting and more to selective harvest methods. The following chart displays the trend in the acres of clearcuts for the period FY 1986-93 (based on timber sales sold).

The philosophical shift in national forest management has also changed the way timber sale profits and losses are viewed. While the Forest Service continues to harvest timber as a resource commodity in conformance with the Multiple-Use Sustained-Yield



Act, in many cases, the primary design of a timber sale now will be to achieve objectives not directly related to the timber resource.

As an example, research indicates that specific tree conditions and compositions of trees within a stand will be less susceptible to attacks by gypsy moths (Gottschalk, 1993 and Gottschalk and MacFarlane, 1993). These conditions can be achieved through the use of selective tree harvest which will improve the overall health and vigor of the forest and reduce the risk of gypsy moth damage. These kinds of sales are not designed to make a profit and, in fact, often operate at a loss. However, the primary objective is to maintain forest health, and the revenues received from the timber sold provide an offset to the costs of meeting that objective.

On June 24, 1993, the U.S. Senate Committee on Agriculture, Nutrition, and Forestry, Subcommittee on Agricultural Research, Nutrition, and Forestry, held a hearing to gather information on below-cost national forest timber sales. Nearly all of the hearing participants recognized that there are valid resource management reasons for continuing some below-cost timber sales and that those reasons are not reflected in the profit and loss statement. The subcommittee noted that the debate over these sales should recognize the nonmonetary and non-market benefits they produce along with the financial factors involved.

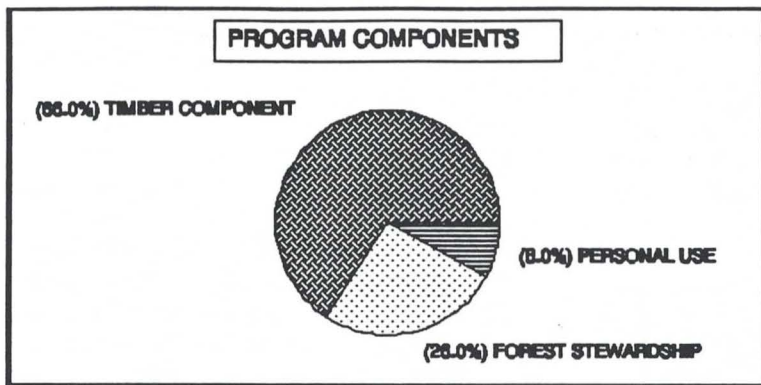
Because of the adoption of ecosystem management and the shift in the way timber harvest is viewed, the Forest Service made a concerted effort in FY 1993 to identify the primary purpose of each timber sale. New definitions for three timber sale program components were developed, then each sale or portion of a sale was categorized according to those definitions. The following three components were included (see Glossary for complete definitions):

- 1) Timber Commodity Component. Timber that is harvested in this component is done so primarily to supply raw material (wood) to help meet the needs of society.

- 2) Forest Stewardship Component. The harvest of trees is used as a cost efficient tool in this component to help achieve desired ecological conditions and non-timber resource objectives as outlined in forest plans.

3) Personal Use Component. Here, forest products such as firewood and Christmas trees are sold and removed by individuals for their personal use.

In FY 1993, harvest in the timber commodity component comprised 66 percent of the total, while forest stewardship and personal use harvest made up 26 and 8 percent of the total respectively.



Besides tracking the volume of timber harvested in each category, TSPIRS also computes the net revenue for each national forest program component. Timber

revenues are recorded for each individual sale and by component. Harvest administration expenses are also tracked separately (by component) on each forest. All of the other expenses are allocated to components based on the amount of timber harvested in each. As an example, if 75, 20, and 5 percent of the timber is harvested in the timber commodity, forest stewardship, and personal use components respectively, timber sale preparation expenses would be allocated to each component in the same proportions. This allocation method of accounting for expenses is not as accurate as the accounting method used for harvest administration, but it does represent the best information available at this time. The specific sections of this report dealing with the timber commodity (page 15), forest stewardship (page 19), and personal use (page 22) components display the net revenue calculation by component for the regionwide timber sale program.

This information about the volume of trees harvested and the net revenue produced in each component provides a close link to current discussions about the below-cost timber sale issue. Questions about when it may or may not be appropriate to apply profitability criteria to national forest timber sales are also directly related. The following section about the timber commodity component provides a more detailed discussion of the FY 1993 below-cost timber sale situation.

TIMBER COMMODITY COMPONENT

Of the total timber harvested from national forests in Region 5 in FY 1993, 66 percent came from the timber commodity component.

Timber is harvested in the timber commodity component primarily to help meet the demands of U.S. citizens for wood products. In the Organic Administration Act (1897), Congress authorized the establishment and administration of national

forests, in part, to "furnish a continuous supply of timber for the use and necessities of citizens of the United States." The Multiple-Use Sustained-Yield Act of 1960 further authorized the administration of national forests to produce a balanced mix of "outdoor recreation, range, timber, watershed, and wildlife and fish purposes." Where the primary purpose of national forest timber harvest is to provide wood for use by citizens, the Forest Service classifies it as "timber commodity" harvest.

This practice of classifying timber sales into components became fully operational through TSPIRS in FY 1993. The table on the next page displays the net revenue produced by harvest in the timber commodity component from all national forests (see Appendix E for more detailed information by national forest).

With the substantial reduction in national forest timber sales that have occurred over the past few years and revisions in forest plans, the proportion of harvest in the timber commodity component is expected to decline in future years.

BELOW-COST TIMBER SALE ISSUE

In previous Timber Sale Program Annual Reports, the Forest Service has reported the number of national forest timber sale programs that operated at a loss based on the entire program without regard for program components. However, with ongoing public debate similar to that presented in the June 24, 1993, Senate hearing, a review of timber sale financial performance based on program components is more appropriate. Possible policy solutions to the below-cost issue could apply different financial performance criteria to one component versus another. One possible solution may require the operation

STATEMENT OF TIMBER SALE REVENUES AND EXPENSES
TIMBER COMMODITY COMPONENT

For the Fiscal Year Ended September 30, 1993
(in thousands of dollars, except as noted)

REVENUES

Timber Sale Receipts	\$ 107,129
Purchaser Road Credits	6,042
Associated Charges	7,156
Interest and Penalties	<u>278</u>
TOTAL REVENUES	\$ 120,605

EXPENSES ¹

Direct Expenses		
Timber Sale	56,818	
Timber Program	<u>6,859</u>	
Total Direct Expenses		63,678
Indirect Expenses		
Timber Sale	420	
Timber Program	<u>6,536</u>	
Total Indirect Expenses		<u>6,956</u>
TOTAL EXPENSES		<u>70,634</u>
NET REVENUE (before extraordinary losses)		49,971
Extraordinary Losses		<u>0</u>
NET REVENUE		<u>\$ 49,971</u>

TOTAL TIMBER HARVESTED (Millions of Board Feet) ² 477

¹ Actual expenses for the timber commodity component are not recorded separate from the other components, except for harvest administration. Instead, they are allocated to the program component based on the total timber commodity harvest volume. A proportion of Regional Office expenses have also been allocated to the timber commodity component.

² Total timber harvest is presented for information purposes only.

of the timber commodity component at a profit while allowing the use of cost efficient harvest in the forest stewardship component, even if it produces a short-term financial loss.

On February 17, 1993, the President announced a plan to phase out below-cost timber sales by the end of 1997 (Executive Office of the President). Under this plan, the Forest Service would begin phasing out below-cost sales in FY 1994 and national forest budgets would be reduced accordingly. While the FY 1994 timber budget was reduced in line with the President's proposal, the Congress, through the Conference Report of the FY 1994 Appropriations Act, directed the Forest Service not to allocate those budget reductions "solely on the basis of a below cost determination" (Yates, 1993). As a result, budget reductions were more evenly distributed among all timber sale programs.

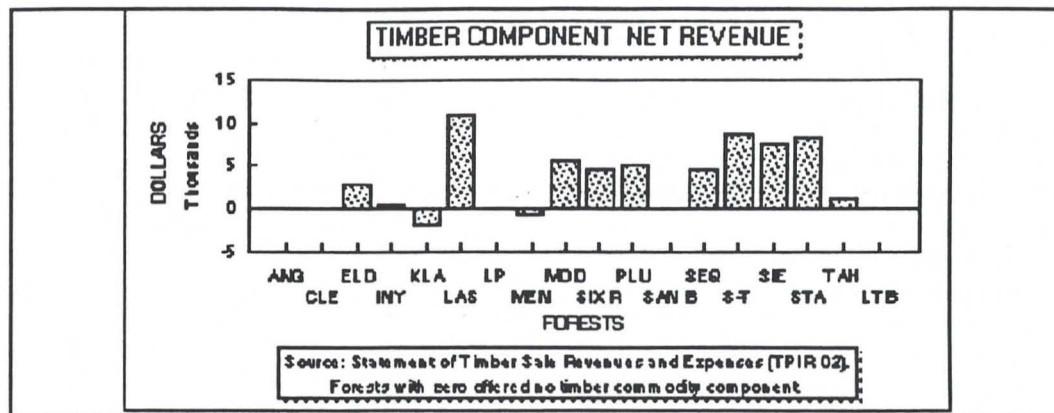
The President's proposal is not intended to eliminate the use of logging as a cost efficient tool to achieve vegetation and non-timber resource management objectives. Harvesting trees is often the most efficient way to achieve desired future ecological conditions and non-timber objectives that require vegetation management. The achievement of those objectives through non-harvest means, such as controlled burning, may be more expensive.

In order to better focus the below-cost issue on timber commodity sales, this report no longer identifies below-cost timber sale programs based on the program as a whole. The term "below-cost" is now used to identify forests that produce negative net revenues in the timber commodity component only (see Appendix E). The harvest of trees to achieve non-timber objectives as reflected through the forest stewardship program component is recognized as providing benefits that are not measured in the financial statement. Therefore, forest stewardship harvest is not included when determining whether a program operates at an above- or below-cost level.

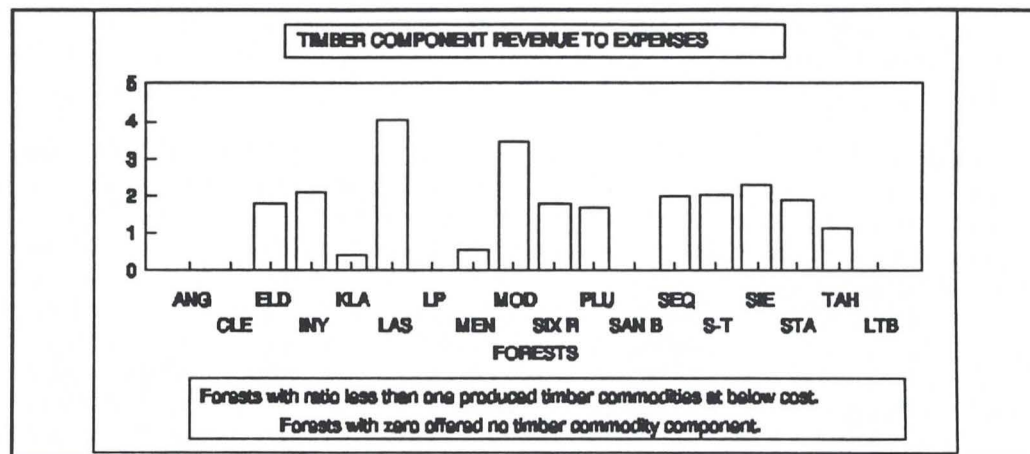
If procedures are improved to better account for expenses by program component, future Timber Sale Program Annual Reports may display revenues and expenses for the timber commodity component only--data for the forest stewardship and personal use components could be dropped from the report.

Based on the timber commodity component net revenue, 7 of the 18 national forests operated at levels where expenses exceeded revenues or did not offer any timber commodity

component in FY 1993. Of the 7, the four southern California forests and the LTBMU did not offer any timber commodity component. The Klamath and Mendocino National



Forests have been impacted by the northern spotted owl and Judge Dwyer's injunction. This has restricted the output of timber sales while cost remain constant. The



below-cost timber commodity components produced 15.6 MMBF, 3 percent of the total timber commodity harvest on all national forests in Region 5.

FOREST STEWARDSHIP COMPONENT

Harvest in the forest stewardship component made up 26 percent of the total harvest from all national forests in Region 5 in FY 1993.

Timber is harvested in the forest stewardship component primarily to achieve desired ecological conditions and non-timber resource benefits that require management of the forest vegetation.

The table on the next page displays the net revenue produced by harvest in the forest stewardship component from all national forests in Region 5 (see Appendix E for information by national forest).

As more sales are sold under ecosystem management principles and harvested in the future, the proportion of harvest in the forest stewardship component is expected to increase.

THE COST EFFICIENT USE OF LOGGING TO ACHIEVE NON-TIMBER OBJECTIVES

Forest Stewardship timber sales, by definition, produce ecological results or non-timber resource benefits that are not reflected in the income statement. These benefits are often not monetarily valued and cannot be included in the financial statements. Therefore, it is not appropriate to judge the worth of those sales solely on the basis of the profits or losses they produce.

Through the use of ecosystem management principles, harvest in the forest stewardship component is specifically designed to achieve non-timber objectives that are outlined in the forest plan. In this component, logging is a tool used to achieve the necessary vegetation management. If the forest had no timber program, or there was no demand for the timber being sold, then these objectives would be achieved through some other means such as controlled burning. In effect, the sale of timber is secondary to the non-timber objectives and the revenue earned is considered an offset to the cost of the project.

As an example, due to California's recent drought and resultant insect mortality, many acres of interspersed smaller dead trees now exist in the Sierran forests. These areas now have a fire hazard which could adversely

**STATEMENT OF TIMBER SALE REVENUES AND EXPENSES
FOREST STEWARDSHIP COMPONENT**

For the Fiscal Year Ended September 30, 1993

(in thousands of dollars, except as noted)

REVENUES

Timber Sale Receipts	\$ 32,919	
Purchaser Road Credits	1,114	
Associated Charges	1,978	
Interest and Penalties	<u>23</u>	
TOTAL REVENUES		\$ 36,034

EXPENSES ¹

Direct Expenses		
Timber Sale	16,512	
Timber Program	<u>2,694</u>	
Total Direct Expenses		19,206
Indirect Expenses		
Timber Sale	468	
Timber Program	2,381	
Total Indirect Expenses		<u>2,849</u>
TOTAL EXPENSES		<u>22,055</u>
NET REVENUE (before extraordinary losses)		13,979
Extraordinary Losses		<u>0</u>
NET REVENUE		<u>\$ 13,979</u>

TOTAL TIMBER HARVESTED (Millions of Board Feet) ² **185**

¹ Actual expenses for the forest stewardship component are not recorded separate from the other components, except for harvest administration. Instead, they are allocated to the program component based on the total forest stewardship harvest volume. A proportion of Regional Office expenses have also been allocated to the forest stewardship component.

² Total timber harvest is presented for information purposes only.

affect surrounding ecosystems. The Forest Service has various options for reducing the fire hazard including controlled burning, logging, cutting and disposal of the dead material at some location, or combinations of these. While the market price for small diameter material may not cover related timber sale expenses, the net cost of selling dead trees often represents the cheapest means of hazard reduction and restoring forest health. Timber sales are often the most desirable tool from an environmental impact perspective. Alternative treatments would be less effective, or feasible due to fiscal limitations.

This example illustrates how harvest in the forest stewardship component results in tangible benefits (ie forest health and fire hazard reduction) that are not counted in the calculation of financial profits or losses. The primary concern about harvest in this component is not one of profit or loss, but one related to whether the most cost efficient and environmentally safe method of achieving the desired objective is being used.

Because of the inability to measure non-timber benefits through the financial statements, it is inappropriate to include forest stewardship component revenues and expenses in the above/below-cost determination. As a result, the financial activity in the timber commodity component only is used to determine if national forests are operating at above or below-cost levels.

PERSONAL USE COMPONENT

Harvest in the personal use component accounts for 8 percent of the total FY 1993 harvest from all national forests in Region 5.

The personal use component includes sales of forest products such as firewood, Christmas trees, ferns, boughs, etcetera, to individuals. These items are sold with the intent that they be used for personal use and not for remanufacture or resale.

The table on the next page displays the net revenue produced by harvest in the personal use component from all national forests in Region 5 (see Appendix E for information by national forest).

Personal use programs are popular on virtually every national forest. The Forest Service views them as public service programs for citizens who, with a little elbow grease, wish to use the resources of their national forests.

**STATEMENT OF TIMBER SALE REVENUES AND EXPENSES
PERSONAL USE COMPONENT**

For the Fiscal Year Ended September 30, 1993
(in thousands of dollars, except as noted)

REVENUES ¹

Timber Sale Receipts	\$ 891
Purchaser Road Credits	0
Associated Charges	134
Interest and Penalties	<u>0</u>
TOTAL REVENUES	\$ 1,025

EXPENSES ²

Direct Expenses		
Timber Sale	6,361	
Timber Program	<u>1,654</u>	
Total Direct Expenses		8,015
Indirect Expenses		
Timber Sale	79	
Timber Program	<u>935</u>	
Total Indirect Expenses		<u>1,014</u>
TOTAL EXPENSES		<u>9,029</u>
NET REVENUE (before extraordinary losses)		(8,004)
Extraordinary Losses	<u>0</u>	
NET REVENUE		<u>\$ (8,004)</u>
TOTAL TIMBER HARVESTED (Millions of Board Feet) ³		<u>58</u>

¹ Some firewood and other materials are provided for personal use, free of charge--no revenues are generated as a result of these permits.

² Actual expenses for the personal use component are not recorded separate from the other components, except for harvest administration. Instead, they are allocated to the program component based on the total personal use harvest volume. A proportion of Regional Office expenses have also been allocated to the personal use component.

³ Only products that can be converted to board feet, such as firewood, are included in the harvest volume. Other non-convertible products, such as Christmas trees, are included in the revenues and expenses, but are not included in the harvest figure. Total timber harvest is presented for information purposes only.

PROGRAM INFORMATION

To get a feel for program size and complexity, review the information related to national forest timber operations in the following table. It provides selected information about timber program in FY 1993. Detailed program information is included in Appendix D.

TIMBER PROGRAM INFORMATION

For the Fiscal Year Ending September 30, 1993

TIMBER INFORMATION

Timber Offered for Sale (MMBF)	769
Timber Sold and Awarded through Contracts (MMBF)	692
Timber Harvested (MMBF)	
Sawtimber	577
Roundwood	2
Firewood (commercial and personal use)	60
Other	<u>82</u>
Total Harvest	<u>720</u>
Total Area Harvested (acres)	124,170
Free Use Firewood Provided (MMBF)	8
Nonconvertible Forest Products Removed	
Christmas Trees (number of trees)	65,280
Other (value in thousands of dollars)	\$ 35
Regeneration Treatment (area reforested in acres)	46,489
Timber Stand Improvement (area treated in acres)	79,847

FOREST ROAD INFORMATION

Road Construction (miles)	
Appropriated Construction	0
Purchaser Credit Construction	<u>67</u>
Total Construction	<u>67</u>
Road Reconstruction (miles)	
Appropriated Reconstruction	5
Purchaser Credit Reconstruction	<u>312</u>
Total Reconstruction	<u>317</u>

USDA FOREST SERVICE CONTACT

Please contact the Forest Service at the following address if you have questions about this report:

USDA Forest Service
Pacific Southwest Region
Attn: Forest Management
630 Sansome Street
San Francisco, CA 94111

REFERENCES

Executive Office of the President, Office of Management and Budget. A Vision of Change for America. 103d Congress, 1st Session....H. Doc. 103-49.

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GLOSSARY

Analysis and Documentation - A cost category established to track the costs of completing environmental analysis and documentation of timber projects in compliance with the National Environmental Policy Act.

Appeals and Litigation - Cost categories established to track the costs of processing administrative appeals and working on litigation related to timber projects as well as the cost of rework to bring those projects into compliance with changed standards resulting from appeals and litigation. This category does not include the sunk costs (investments) in timber sales that are started but later abandoned because of appeal or legal decisions, nor does it include any revenues foregone or opportunity costs associated with those decisions.

Benefits - Goods, services, or uses resulting from projects or programs. These goods or services may or may not be exchanged in the normal marketplace. Timber and minerals benefits are often considered "commodity" benefits that produce revenue, whereas recreation and wildlife benefits are often considered "non-commodity" benefits.

Cost Pool - An accounting mechanism for the collection of expenditure data in like categories (single-year or multi-year) for the purposes of matching costs against related revenues in the reporting year. In TSPIRS, there are three types of cost pools designed to conform to GAAP. They include:

1) Sale Activity Pool. This pool includes costs of activities directly related to the preparation of timber for sale at an auction. Funds obligated to these activities for the current year are added to the pool and expenses are calculated based on the formula:

Sale Activity Expense =

$$\frac{(\text{Volume Harvested})(\text{Current Year Pool Balance})}{(\text{Volume Under Contract}) + (\text{Volume Harvested})}$$

2) Growth Activity Pool. This pool includes the cost of activities related to growing trees over a rotation period (from reforestation to harvest). These expenses, such as reforestation and timber stand improvement costs, represent investments in the growth of trees. Funds obligated to these activities are added

to the pool and expenses are calculated based on the formula:

$$\text{Growth Activity Expense} = \frac{(\text{Volume Harvested})(\text{Current Year Pool Balance})}{(\text{Growing Stock Volume})}$$

See "Growing Stock" for a description of the growing stock volume estimate.

3) Depreciation Pools. The expenses for roads and facilities are depreciated over their useful lives using these pools. Facilities, including buildings, are depreciated over a 30-year useful life. Road design and construction costs are capitalized and depreciated by component based on the useful life of that component. The following useful life schedules are used for each component:

Surfacing	--	10 years
Culverts	--	30 years
Bridges	--	50 years

Road prism costs, including the costs of excavation, are capitalized as a permanent land improvement and are not depreciable (assuming routine maintenance is performed to maintain the road contour). Beginning in FY 1993, regional and Washington office transportation planning costs are expensed on an annual basis.

Ecosystem Management - The use of an ecological approach to achieve the multiple use management of national forests and grasslands by blending the needs of people and environmental values in such a way that national forests and grasslands represent diverse, healthy, productive, and sustainable ecosystems.

Forest Stewardship Component -- Timber harvest that is designed primarily to achieve forest stewardship objectives that require vegetation management as outlined in forest plans is included in this program component. If the forest had no timber program or if there was no demand for the timber being harvested, these vegetation management projects would be accomplished through some other means such as controlled burning. When timber harvest is used it is generally the most financially efficient way of achieving the necessary vegetation management (i.e., it produces the least net cost when both current costs and revenues are considered). Where timber harvest is selected to achieve the forest

stewardship objective, the sale of timber is secondary to achieving that objective. This timber may be harvested from lands classified as suited or unsuited for timber management through green or salvage sales. Portions of projects that are primarily designed to achieve forest stewardship objectives are coded as "forest stewardship" (FS) in the Timber Sale Accounting system along with the appropriate percent of the associated sale volume.

General and Administration (GA) Costs - The cost of line management and program support that cannot be identified with specific programs. A proportionate amount of the total forest GA is allocated to the timber program based on the ratio of timber expenditures to total forest expenditures.

Generally Accepted Accounting Principles (GAAP) - Conventions, rules, and procedures defining accepted accounting practice, including both broad guidelines and detailed procedures--developed by the Financial Accounting Standards Board and the Accounting Principles Board of the American Institute of Certified Public Accountants.

Growing Stock - Growing Stock is an estimate of the current merchantable volume of timber growing on lands classified as suitable for timber management in trees 5 inches DBH or greater. The estimate of growing stock is normally based on the timber inventory information included in the forest plan and adjusted for growth, mortality, and removals since implementation of the plan. If more recent inventory information is available for the suitable land base, that information is used and updated accordingly. For purposes of the TSPIRS report, growing stock volume at the beginning of the fiscal year is used in the calculation of expenses from the growth activity cost pool.

Harvest Administration - This cost category includes all aspects of supervising, administering, guiding, assisting, controlling, and reporting the harvest of contracted timber volumes by timber purchasers. Timber purchasers conduct activities in compliance with provisions of the timber sale contract to protect or enhance the forest environment and other forest resources. Typical activities include scaling, check scaling, day-to-day contract administration, inspections of operations, rate determinations, breach actions, contract modifications, report preparation, and others.

KV (Knutson-Vandenberg) Funds - The Knutson-Vandenberg Act passed in 1930 by Congress authorized the collection of these funds from timber sale receipts to be used for reforestation, timber stand improvement, and other resource improvements in timber sale areas.

MBF (Thousand Board Feet) - A standard measure of lumber--1 board foot is equal to a piece of lumber that is 12 inches wide by 12 inches long by 1 inch thick. An MBF is equal to 1,000 board feet.

MMBF - One million board feet.

Multiple-Use - As set forth in the Multiple-Use Sustained-Yield Act (1960), this is the management of all national forest renewable resources in the combination that best meets the needs of the American people. This management approach makes the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude to adjust management to conform to changing needs and conditions.

Obligations - Funds (moneys) obligated for payment during a particular fiscal year. The money is counted as obligated when it is owed to the receiving party. On an obligation basis, expenditures are counted at the time the money is obligated, even though the actual cash transactions or payments have not yet taken place.

Other Resource Support - The cost of completing non-timber resource activities in support of timber projects. As an example, wildlife biologists often need to complete biological evaluations of timber sale projects in order to determine if sensitive, threatened, or endangered species would be affected by the sale. The cost of these evaluations is recorded and tracked in the "other resource support" cost category.

Payments to States - Appropriations to States and counties by Congress based on a formula involving revenue received from Federal lands. The original act (May 23, 1908, 16 U.S.C. 500) established these revenue sharing payments at 25 percent of the gross receipts received. However, Congressional modifications to the act have changed the 25-percent formula based local situations. Under California law, half of these payments are to be used for county roads and the other half for local schools.

Personal Use Component -- Forest product sales of any

size or value are included in this program component where the presumption is that the purchaser will use the material for personal use rather than for manufacture and/or resale. This category includes all free-use permits and paid permits or sales less than or equal to the following quantities:

- ... 10 cords
- ... 5 thousand board feet
- ... 3 Christmas trees
- ... \$20.00 value for other products that cannot be converted to a board foot or cubic foot equivalent

These permits or sales (with the exception of free-use) are coded as personal use (PP) in the Timber Sale Accounting system.

Present Net Value (PNV) - The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of management. The Forest Service uses a 4-percent discount rate.

Purchaser Credit - Credit earned by timber purchasers through road construction that is applied to stumpage charges (bills) above base rates. The total amount of credit established is considered revenue since it is being used to pay for timber. Purchaser credit is based on the value of the road as determined by the Forest Service engineer's estimate and established in the timber sale contract.

Reforestation (also Regeneration) - Treatments and activities that help to reestablish stands of trees after harvest. Typical activities include preparing the soil, controlling pests, and planting seeds or seedlings.

Road Maintenance - This cost category includes obligations of funds deposited by timber purchasers to perform road maintenance attributable to the purchaser's use of the roads as defined in the timber sale contract.

Sale Preparation - Generally, sale preparation includes all activities undertaken to prepare national forest timber for sale. Since sale preparation activities included in the National Environmental Policy Act (NEPA) analysis and documentation, NEPA-related other resource support, and appeals and litigation have been moved to separate cost categories, the sale preparation cost category now includes timber-related field work and contract preparation.

Salvage Sale - The removal of dead, dying, deteriorating, or susceptible trees to prevent the spread of pests or pathogens, to promote healthy, vigorous stands of trees, and/or to aid in the recovery of trees damaged by fire, wind, insects, fungi, or other injurious agents before the timber becomes worthless for harvesting.

Sawtimber - Trees suitable in size and quality for producing logs that can be processed into lumber.

Silvicultural Examination - The process used to gather detailed, on-site field data to determine management opportunities and direction for the timber resource within a small subdivision of a forested area.

Timber Commodity Component -- Timber harvest that is designed to achieve the timber volume objectives of the forest plan is included in this program component. The sale and harvest of this timber is primarily for the purpose of providing forest product raw material to contribute to the Nation's timber supply. This timber may only be harvested from lands classified as suited for timber harvest in the land and resource management plan using either green or salvage sales. The portion of a project that is primarily designed to meet timber purpose objectives is coded as "timber commodity purpose" (TC) in the Timber Sale Accounting system. The proportion (percent) of the project (based on volume) that is represented by a primary timber commodity purpose is also coded in the system.

Timber Stand Improvement (TSI) - Noncommercial cutting and other treatments made to increase the growth and improve the quality of trees for timber uses. Treatments include thinning, pruning, weeding, prescribed burning, and fertilizing established stands of trees.

TSPIRS - Timber Sale Program Information Reporting System. A reporting system developed jointly by the Forest Service and the General Accounting Office to provide annual information about the financial, employment-related, and economic performance of national forest timber sale programs.

Appendix A -- Statement of Timber Sale Revenues and Expenses by Forest -- FISCAL YEAR 1993

Appendix B -- Unit Value Information by Forest -- FISCAL YEAR 1993

Appendix C -- Economic Account by Forest -- FISCAL YEAR 1993

Appendix D -- Employment, Income, and Program Level Account by Forest -- FISCAL YEAR 1993

Appendix E -- Forest Level Statement of Timber Sale Revenues and Expenses by Program Component -- FISCAL YEAR 1993

The policy of the United States Department of Agriculture Forest Service prohibits discrimination on the basis of race, color, national origin, age, religion, sex, or disability. Persons believing they have been discriminated against in any Forest Service related activity should write to the Chief, Forest Service, USDA, Washington, DC, 20250.

Appendix A

Statement of Timber Sale Revenues and Expenses by National Forest Fiscal Year 93

FORESTS	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	Los Padres
REVENUE							
TIMBER SALES	\$22,081	\$6,927	\$21,897,283	\$1,047,270	\$2,243,586	\$16,083,303	\$7,520
PURCH ROAD CREDIT			1,287,731		295,849	531,536	
ASSOC CHARGES		1,463	1,056,906	18,329	289,369	903,466	6,472
INT & PENALTIES			5,855	11,614	10,077	22,253	
TOTAL	22,081	8,390	24,247,754	1,077,213	2,818,880	17,540,558	13,993
DIRECT TM SALE EXP							
TOTAL HAR ADMIN	21,494	6,817	1,723,573	192,615	722,888	1,121,404	64,254
GEN ADMIN - SALES	3,847	14,705	980,053	104,992	810,712	1,066,345	14,476
SALE PREP	60,960	17,040	1,342,807	168,872	897,958	1,190,681	51,194
ANALY/DOC			81,663	419	70,844	99,793	
APPEALS/LIT			178		629	13,287	
OTHER RES SUP	7,477	6,186	908,264	52,607	625,602	641,050	
BD FUND	122	16	339,784	8,536	1,049,683	623,908	328
COOP RD MAINT	3		335,491	9,154	135,010	90,923	767
RD DEP EXP							
TOTAL RD DES/CON	559	2,170	350,779	16,578	779,096	198,959	0
TOTAL RD PC	0	0	704,456	23,900	440,949	178,310	0
TOTAL APP & LIT	0	0	0	0	1,072	0	0
TOTAL TM SALE EXP	\$94,463	\$46,934	\$6,747,048	\$577,673	\$5,534,444	\$5,224,660	\$131,020
TM PROG EXP							
TM PLANNING	(6)	168	(56,848)	3	1,992	12,236	(426)
TRAN PLANNING			35,784		49	18,994	
SILVI EXAM	17,070	2,994	52,413	34,538	72,657	66,512	5,419
GENET TREE IMP	1,473	850	(39,986)	52	1,188	16,711	885
APPROP REFOR	174,129	14,333	17,475	585	65,842	26,199	41,709
KV REFOR	850		144,178	1,107	87,594	131,283	3,116
APPROP STAND IMP	180,529	39,880	30,560	420	34,163	37,426	31,003
KV STAND IMP	10,349		114,462	955	46,203	88,534	
FACIL DEP	0	(1)	44,030	1,467	24,955	52	
TOTAL TM PROG EXP	\$384,394	\$58,223	\$342,067	\$39,126	\$334,642	\$397,946	\$81,706
TOT DIRECT EXP	\$478,857	\$105,157	\$7,089,115	\$616,799	\$5,869,086	\$5,622,607	\$212,726
INDIRECT EXP							
TM SALE EXP							
APP & LIT			573,617		226,326	80	
TOT TM SA INDIR	0	0	573,617	0	226,326	80	0
TM PROG GEN AD	35,814	21,319	508,591	44,017	1,120,015	336,371	13,753
TOT TM PROG IND	35,814	21,319	508,591	44,017	1,120,015	336,371	13,753
TOT INDIR EXP	\$35,814	\$21,319	\$1,082,209	\$44,017	\$1,346,341	\$336,451	\$13,753
TOT TM EXP	\$514,671	\$126,476	\$8,171,324	\$660,816	\$7,215,427	\$5,959,058	\$226,480
GAIN/LOSS	(\$492,590)	(\$118,086)	\$16,076,431	\$416,397	(\$4,396,747)	\$11,581,500	(\$212,487)
EXTRAORDIN EXP	0	0	0	0	0	0	0
PAYMENTS TO STATE	5,308	1,645	5,494,987	296,610	3,314,375	3,837,040	1,779
NET GAIN/LOSS	(\$497,898)	(\$119,731)	\$10,581,444	\$119,788	(\$7,711,122)	\$7,744,461	(\$214,266)
VOL HARVEST (MBF)	317	280	97,400	8,378	22,736	85,523	335

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

Incorrect Growing Stock data was reported to the Washington Office. This error has been corrected for this Regional Report for the Angeles, Cleveland, Los Padres, San Bernardino, and Lake Tahoe Basin Management Unit.

Appendix A **Statement of Timber Sale Revenues and Expenses** **by National Forest** **Fiscal Year 93**

FORESTS	Mendocino	Modoc	Six Rivers	Plumas	San Bernardino	Sequoia	Shasta-Trinity
REVENUE							
TIMBER SALES	\$1,201,580	\$9,742,869	\$10,308,150	\$13,180,728	\$183,883	\$8,458,121	\$19,790,088
PURCH ROAD CREDIT	57,894	101,189	6,414	692,978		343,140	1,105,192
ASSOC CHARGES	71,047	385,519	358,173	1,336,449	8,039	772,442	1,324,452
INT & PENALTIES	317		58,298	93,374	884	21,549	2,400
TOTAL	1,330,818	10,229,377	10,731,034	15,303,530	172,786	9,595,252	22,222,132
DIRECT TM SALE EXP							
TOTAL HAR ADMIN	230,211	443,442	910,809	1,842,176	105,933	603,214	776,378
GEN ADMIN - SALES	280,401	895,155	522,207	1,588,915	35,804	886,459	667,094
SALE PREP	279,228	569,940	914,134	2,114,786	178,744	881,690	1,824,424
ANALY/DOC	37,014	89,120	129,498	448,680		158,361	387,921
APPEALS/LIT	9,701	2,498	8,456	25,829		78,353	20,154
OTHER RES SUP	156,401	452,153	688,067	1,454,811	51,750	853,341	1,003,033
BD FUND	413,295	299,382	889,939	1,159,185	6,669	428,088	1,557,240
COOP RD MAINT	99,880	130,805	274,838	322,183	5,085	40,523	481,213
RD DEP EXP							
TOTAL RD DES/CON	441,487	293,508	554,495	715,491	285	338,832	805,732
TOTAL RD PC	478,092	172,920	404,322	1,117,386	0	23,289	981,275
TOTAL APP & LIT	0	0	1,076	282	0	615	9
TOTAL TM SALE EXP	\$2,405,708	\$3,148,702	\$5,297,440	\$10,589,485	\$384,050	\$4,070,775	\$8,504,474
TM PROG EXP							
TM PLANNING	(402)	4,330	4,557	25,425	5	8,219	4,495
TRAN PLANNING	(8)	(67)	125,557	54,529		16,021	23,708
SILVI EXAM	29,030	163,501	156,949	369,783	33,671	165,980	222,948
GENET TREE IMP	2,881	8,612	4,390	7,554	12,561	7,872	10,889
APPROP REFOR	9,104	46,555	24,047	36,858	113,382	55,064	176,230
KV REFOR	13,516	77,178	58,349	77,811	18,324	68,777	297,804
APPROP STAND IMP	5,008	32,206	19,417	19,822	236,050	30,791	79,459
KV STAND IMP	10,522	82,888	19,813	68,630	11,891	42,580	101,359
FACIL DEP	5,814	3,243	3,623	9,570	1,045	10,199	33,099
TOTAL TM PROG EXP	\$75,263	\$418,446	\$416,702	\$669,992	\$426,726	\$405,302	\$949,972
TOT DIRECT EXP	\$2,480,969	\$3,567,148	\$5,714,142	\$11,259,457	\$810,778	\$4,476,077	\$9,454,446
INDIRECT EXP							
TM SALE EXP							
APP & LIT		4,162	15,191	185		10,359	
TOT TM SA INDIR	0	4,162	15,191	185	0	10,359	0
TM PROG GEN AD	799,863	410,020	567,086	627,145	42,975	614,454	941,525
TOT TM PROG IND	799,863	410,020	567,086	627,145	42,975	614,454	941,525
TOT INDIR EXP	\$799,863	\$414,182	\$582,276	\$627,310	\$42,975	\$624,813	\$941,525
TOT TM EXP	\$3,280,832	\$3,981,330	\$6,296,419	\$11,886,767	\$853,753	\$5,100,890	\$10,395,971
GAIN/LOSS	(\$1,950,014)	\$6,248,047	\$4,434,615	\$3,416,763	(\$680,967)	\$4,494,362	\$11,826,161
EXTRAORDIN EXP	0	0	0	0	0	0	0
PAYMENTS TO STATE	1,392,387	2,732,840	4,237,238	3,472,512	41,917	2,116,185	6,709,444
NET GAIN/LOSS	(\$3,342,402)	\$3,515,207	\$197,377	(\$55,749)	(\$722,884)	\$2,378,177	\$5,116,717
VOL HARVEST (MBF)	7,271	37,024	41,931	88,168	4,202	46,275	73,426

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

Incorrect Growing Stock data was reported to the Washington Office. This error has been corrected for this Regional Report for the Angeles, Cleveland, Los Padres, San Bernardino, and Lake Tahoe Basin Management Unit.

Appendix A

Statement of Timber Sale Revenues and Expenses by National Forest Fiscal Year 93

FORESTS	Sierra	Stanislaus	Tahoe	Lake Tahoe Basin	RO	TOTAL
REVENUE						
TIMBER SALES	\$14,600,524	\$14,424,809	\$7,667,472	\$93,717		\$140,939,672
PURCH ROAD CREDIT	562,092	2,069,051	102,801			\$7,155,667
ASSOC CHARGES	1,038,334	1,256,563	428,155	33,582		\$9,268,758
INT & PENALTIES	64,649	338	9,326	200		\$301,113
TOTAL	16,265,598	17,750,760	8,207,755	127,499	0	\$157,665,209
DIRECT TM SALE EXP						
TOTAL HAR ADMIN	1,014,755	1,262,859	551,313	65,163	960,231	\$12,419,331
GEN ADMIN - SALES	754,156	801,497	976,619	96,524	1,740,022	\$11,781,784
SALE PREP	1,370,090	2,123,802	1,676,052	388,741	1,291,813	\$17,342,934
ANALY/DOC		96,306	200,751			\$1,800,371
APPEALS/LIT		8,292	21,205	522	294,338	\$483,443
OTHER RES SUP	901,900	1,592,083	1,148,610	168,230	63,812	\$10,775,157
BD FUND	917,464	942,104	601,560	29,460	120,131	\$9,384,864
COOP RD MAINT	422,269	294,963	191,151	7,260		\$2,841,117
RD DEP EXP						
TOTAL RD DES/CON	974,113	939,165	594,695	1,797	0	\$7,007,722
TOTAL RD PC	412,920	511,145	400,679	0	0	\$5,849,642
TOTAL APP & LIT	62	1,464	152	0	0	\$4,713
TOTAL TM SALE EXP	\$6,767,729	\$8,573,660	\$6,362,789	\$759,696	\$4,470,348	\$79,691,076
TM PROG EXP						
TM PLANNING	614	56,836	21,734		674,835	\$757,768
TRAN PLANNING	37,539	(52,347)	3,826	9,857	661,574	\$1,135,020
SILVI EXAM	147,645	131,184	110,626	32,836	1,292,323	\$3,106,300
GENET TREE IMP	9,719	14,155	13,931	7,061	73,332	\$153,710
APPROP REFOR	45,812	169,716	32,857	4,166	525,794	\$1,579,854
KV REFOR	124,900	246,594	59,411	111,736	364,021	\$1,866,549
APPROP STAND IMP	34,279	61,111	24,120	16,096	205,060	\$1,117,396
KV STAND IMP	85,706	97,021	31,692	82,147	375,962	\$1,270,735
FACIL DEP	7,212	8,746	4,857	50	39,786	\$197,748
TOTAL TM PROG EXP	\$493,628	\$733,030	\$303,256	\$263,948	\$4,412,708	\$11,207,081
TOT DIRECT EXP	\$7,261,357	\$9,306,690	\$6,666,045	\$1,023,646	\$8,883,056	\$90,898,158
INDIRECT EXP						
TM SALE EXP						
APP & LIT	2,720	9,942	13,757		110,647	\$966,967
TOT TM SA INDIR	2,720	9,942	13,757	0	110,647	\$966,967
TM PROG GEN AD	440,641	537,008	629,927	54,940	2,107,031	\$9,852,496
TOT TM PROG IND	440,641	537,008	629,927	54,940	2,107,031	\$9,852,496
TOT INDIR EXP	\$443,361	\$546,951	\$643,684	\$54,940	\$2,217,679	\$10,819,463
TOT TM EXP	\$7,704,718	\$9,853,641	\$7,309,729	\$1,078,586	\$11,100,735	\$101,717,621
GAIN/LOSS	\$8,560,880	\$7,897,120	\$98,026	(\$951,087)	(\$11,100,735)	\$55,947,589
EXTRAORDIN EXP	0	0	0	0	0	\$0
PAYMENTS TO STATE	3,294,744	3,936,867	2,040,340	23,429	0	\$42,949,650
NET GAIN/LOSS	\$5,266,136	\$3,960,253	(\$1,142,314)	(\$974,516)	(\$11,100,735)	\$12,997,939
VOL HARVEST (MBF)	64,920	99,637	38,672	3,179		719,874

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

Incorrect Growing Stock data was reported to the Washington Office. This error has been corrected for this Regional Report for the Angeles, Cleveland, Los Padres, San Bernardino, and Lake Tahoe Basin Management Unit.

Appendix B
Unit Value Information
by National Forest
Fiscal Year 93

FORESTS	Angeles	Cleveland	Eldorado	Inyo	Klamath	Lassen	Los Padres
REVENUE							
TIMBER SALES	\$69.65	\$24.74	\$224.82	\$125.00	\$98.68	\$188.06	\$22.45
PURCH ROAD CREDIT	0.00	0.00	13.22	0.00	13.00	6.22	0.00
ASSOC CHARGES	0.00	5.22	10.85	2.19	11.85	10.56	19.32
INT & PENALTIES	0.00	0.00	0.06	1.39	0.44	0.26	0.00
TOTAL	\$69.65	\$29.96	\$248.95	\$128.58	\$123.97	\$205.10	\$41.77
DIRECT TM SALE EXP							
TOTAL HAR ADMIN	67.80	24.35	17.70	22.99	31.79	13.11	191.80
GEN ADMIN - SALES	12.14	52.52	9.86	12.53	35.66	12.47	43.21
SALE PREP	192.30	60.86	13.79	20.16	39.49	13.92	152.82
ANALY/DOC	0.00	0.00	0.84	0.05	3.12	1.17	0.00
APPEALS/LIT	0.00	0.00	0.00	0.00	0.03	0.16	0.00
OTHER RES SUP	23.59	22.09	9.33	6.28	27.52	7.50	0.00
BD FUND	0.39	0.06	3.49	1.02	48.17	7.30	0.98
COOP RD MAINT	0.01	0.00	3.44	1.09	5.94	1.06	2.29
RD DEP EXP							
TOTAL RD DES/CON	1.76	7.75	3.60	1.98	34.27	2.33	0.00
TOTAL RD PC	0.00	0.00	7.23	2.85	19.39	2.08	0.00
TOTAL APP & LIT	0.00	0.00	0.00	0.00	0.05	0.00	0.00
TOTAL TM SALE EXP	\$297.99	\$167.62	\$69.27	\$68.95	\$243.42	\$61.09	\$391.10
TM PROG EXP							
TM PLANNING	-0.02	0.60	-0.58	0.00	0.09	0.14	-1.27
TRAN PLANNING	0.00	0.00	0.37	0.00	0.00	0.22	0.00
SILVI EXAM	53.85	10.69	0.54	4.12	3.20	0.78	16.17
GENET TREE IMP	4.65	3.04	-0.41	0.01	0.05	0.20	2.84
APPROP REFOR	549.30	51.19	0.18	0.07	2.90	0.31	124.50
KV REFOR	2.68	0.00	1.48	0.13	3.85	1.54	9.30
APPROP STAND IMP	569.49	142.43	0.31	0.05	1.50	0.44	92.55
KV STAND IMP	32.65	0.00	1.18	0.11	2.03	1.04	0.00
FACIL DEP	0.00	-0.00	0.45	0.18	1.10	0.00	0.00
TOTAL TM PROG EXP	\$1,212.60	\$207.94	\$3.51	\$4.67	\$14.72	\$4.65	\$243.90
TOT DIRECT EXP	\$1,510.59	\$375.56	\$72.78	\$73.62	\$258.14	\$65.74	\$635.00
INDIRECT EXP							
TM SALE EXP							
APP & LIT	0.00	0.00	5.89	0.00	9.95	0.00	0.00
TOT TM SA INDIR	0.00	0.00	5.89	0.00	9.95	0.00	0.00
TM PROG GEN AD	112.98	76.14	5.22	5.25	49.26	3.93	41.05
TOT TM PROG IND	112.98	76.14	5.22	5.25	49.26	3.93	41.05
TOT INDIR EXP	\$112.98	\$76.14	\$11.11	\$5.25	\$59.22	\$3.93	\$41.05
TOT TM EXP	\$1,623.57	\$451.70	\$83.89	\$78.88	\$317.36	\$69.68	\$676.06
GAIN/LOSS	(\$1,553.91)	(\$421.74)	\$165.06	\$49.70	(\$193.38)	\$135.42	(\$634.29)
EXTRAORDIN EXP	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAYMENTS TO STATE	16.75	5.87	56.42	35.40	145.78	44.87	5.31
NET GAIN/LOSS	(\$1,570.66)	(\$427.61)	\$108.64	\$14.30	(\$339.16)	\$90.55	(\$639.60)
VOL HARVEST (MBF)	0	280	97,400	8,378	22,736	85,523	335

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

Incorrect Growing Stock data was reported to the Washington Office. This error has been corrected for this Regional Report for the Angeles, Cleveland, Los Padres, San Bernardino, and Lake Tahoe Basin Management Unit.

Appendix B **Unit Value Information** **by National Forest** **Fiscal Year 93**

FORESTS	Mendocino	Modoc	Six Rivers	Plumas	San Bernardino	Sequoia	Shasta-Trinity
REVENUE							
TIMBER SALES	\$165.25	\$263.14	\$245.84	\$149.50	\$39.00	\$182.78	\$269.52
PURCH ROAD CREDIT	7.96	2.73	0.15	7.86	0.00	7.42	15.05
ASSOC CHARGES	9.77	10.41	8.54	15.16	1.91	16.89	18.04
INT & PENALTIES	0.04	0.00	1.39	1.06	0.21	0.47	0.03
TOTAL	\$183.03	\$276.29	\$255.92	\$173.57	\$41.12	\$207.35	\$302.65
DIRECT TM SALE EXP							
TOTAL HAR ADMIN	31.66	11.98	21.72	18.63	25.21	13.04	10.57
GEN ADMIN - SALES	35.81	18.78	12.45	18.02	8.47	14.40	9.09
SALE PREP	38.40	15.39	21.80	23.99	42.54	19.05	24.85
ANALY/DOC	5.09	2.41	3.09	5.09	0.00	3.42	5.28
APPEALS/LIT	1.33	0.07	0.20	0.29	0.00	1.89	0.27
OTHER RES SUP	21.51	12.21	16.41	16.50	12.32	18.44	13.66
BD FUND	58.84	8.09	21.22	13.15	1.59	9.21	21.21
COOP RD MAINT	13.74	3.53	6.55	3.65	1.21	0.88	6.55
RD DEP EXP							
TOTAL RD DES/CON	60.72	7.93	13.22	8.12	0.06	7.32	10.97
TOTAL RD PC	65.75	4.67	9.64	12.67	0.00	0.50	13.36
TOTAL APP & LIT	0.00	0.00	0.03	0.00	0.00	0.01	0.00
TOTAL TM SALE EXP	\$330.86	\$85.04	\$128.34	\$120.11	\$91.40	\$87.97	\$115.82
TM PROG EXP							
TM PLANNING	-0.06	0.12	0.11	0.29	0.00	0.18	0.06
TRAN PLANNING	-0.00	-0.00	2.99	0.62	0.00	0.35	0.32
SILVI EXAM	3.99	4.42	3.74	4.19	8.01	3.59	3.04
GENET TREE IMP	0.37	0.23	0.10	0.09	2.99	0.17	0.15
APPROP REFOR	1.25	1.26	0.57	0.42	26.98	1.19	2.40
KV REFOR	1.86	2.08	1.39	0.88	4.36	1.49	4.06
APPROP STAND IMP	0.89	0.87	0.48	0.22	56.18	0.87	1.08
KV STAND IMP	1.45	2.24	0.47	0.78	2.78	0.92	1.38
FACIL DEP	0.80	0.09	0.09	0.11	0.25	0.22	0.45
TOTAL TM PROG EXP	\$10.35	\$11.30	\$9.94	\$7.60	\$101.55	\$8.76	\$12.94
TOT DIRECT EXP	\$341.21	\$96.35	\$138.27	\$127.70	\$192.95	\$96.73	\$128.76
INDIRECT EXP							
TM SALE EXP							
APP & LIT	0.00	0.11	0.36	0.00	0.00	0.22	0.00
TOT TM SA INDIR	0.00	0.11	0.36	0.00	0.00	0.22	0.00
TM PROG GEN AD	110.01	11.07	13.52	7.11	10.23	13.28	12.82
TOT TM PROG IND	110.01	11.07	13.52	7.11	10.23	13.28	12.82
TOT INDIR EXP	\$110.01	\$11.19	\$13.89	\$7.11	\$10.23	\$13.50	\$12.82
TOT TM EXP	\$451.22	\$107.53	\$150.16	\$134.82	\$203.18	\$110.23	\$141.58
GAIN/LOSS	(\$268.19)	\$168.76	\$105.76	\$38.75	(\$162.06)	\$97.12	\$161.06
EXTRAORDIN EXP	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PAYMENTS TO STATE	191.50	73.81	101.05	39.39	9.98	45.73	91.38
NET GAIN/LOSS	(\$459.69)	\$94.94	\$4.71	(\$0.63)	(\$172.03)	\$51.39	\$69.69
VOL HARVEST (MBF)	7,271	37,024	41,931	88,168	4,202	46,275	73,426

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

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Appendix B **Unit Value Information** **by National Forest** **Fiscal Year 93**

FORESTS	Sierra	Stanislaus	Tahoe	Lake Tahoe Basin	Regional Average
REVENUE					
TIMBER SALES	\$224.90	\$144.77	\$197.25	\$29.48	\$195.78
PURCH ROAD CREDIT	8.86	20.77	2.84	0.00	9.94
ASSOC CHARGES	15.99	12.81	11.01	10.56	12.88
INT & PENALTIES	1.00	0.00	0.24	0.06	0.42
TOTAL	\$250.55	\$178.15	\$211.15	\$40.11	\$219.02
DIRECT TM SALE EXP					
TOTAL HAR ADMIN	15.83	12.87	14.18	20.50	17.25
GEN ADMIN - SALES					
SALE PREP	11.82	8.04	25.12	30.99	18.37
ANALY/DOC	21.10	21.32	43.12	122.28	24.09
APPEALS/LIT	0.00	0.97	5.16	0.00	2.50
OTHER RES SUP	0.00	0.08	0.55	0.16	0.67
BD FUND	13.89	15.98	29.55	52.92	14.97
COOP RD MAINT	14.13	9.46	15.48	9.27	13.04
RD DEP EXP	6.50	2.96	4.92	2.28	3.95
TOTAL RD DES/CON	15.00	9.43	15.30	0.57	9.73
TOTAL RD PC	6.36	5.13	10.31	0.00	8.13
TOTAL APP & LIT	0.00	0.01	0.00	0.00	0.01
TOTAL TM SALE EXP	\$104.25	\$86.05	\$163.69	\$238.97	\$110.70
TM PROG EXP					
TM PLANNING	0.01	0.57	0.56	0.00	1.05
TRAN PLANNING	0.58	-0.53	0.10	3.10	1.58
SILVI EXAM	2.28	1.32	2.85	10.33	4.32
GENET TREE IMP	0.15	0.14	0.38	2.22	0.21
APPROP REFOR	0.71	1.70	0.85	1.31	2.19
KV REFOR	1.92	2.47	1.53	35.15	2.62
APPROP STAND IMP	0.53	0.81	0.82	5.06	1.55
KV STAND IMP	1.32	0.97	0.82	25.84	1.77
FACIL DEP	0.11	0.09	0.12	0.02	0.27
TOTAL TM PROG EXP	\$7.80	\$7.36	\$7.80	\$83.03	\$15.57
TOT DIRECT EXP	\$111.85	\$93.41	\$171.49	\$322.00	\$126.27
INDIRECT EXP					
TM SALE EXP					
APP & LIT	0.04	0.10	0.35	0.00	1.34
TOT TM SA INDIR	0.04	0.10	0.35	0.00	1.34
TM PROG GEN AD	6.79	5.39	16.21	17.28	13.69
TOT TM PROG IND	6.79	5.39	16.21	17.28	13.69
TOT INDIR EXP	\$6.83	\$5.49	\$16.56	\$17.28	\$15.03
TOT TM EXP	\$118.68	\$98.90	\$188.05	\$339.28	\$141.30
GAIN/LOSS	\$131.87	\$79.26	\$23.10	(\$299.18)	\$77.72
EXTRAORDIN EXP	0.00	0.00	0.00	0.00	0.00
PAYMENTS TO STATE	50.75	39.51	52.49	7.37	59.66
NET GAIN/LOSS	\$81.12	\$39.75	(\$29.39)	(\$306.55)	\$18.06
VOL HARVEST (MBF)	64,920	99,637	38,872	3,179	719,557

Note: Sale Activity Pool Cost is amortized on the basis of annual harvest.
Growth Activity Pool cost is amortized on the basis of Growing Stock.
Depreciation is calculated on the basis of useful lives.

Incorrect Growing Stock data was reported to the Washington Office. This error has been corrected for this Regional Report for the Angeles, Cleveland, Los Padres, San Bernardino, and Lake Tahoe Basin Management Unit.

APPENDIX C
ECONOMIC INFORMATION BY NATIONAL FOREST
FISCAL YEAR 1993
('000 of dollars)

	Angeles	Cleveland	Eldorado	Inyo	Klamath
I. PRESENT VALUE OF BENEFITS					
POSITIVE EFFECTS					
-1 TIMBER	309	8	28,413	4,642	3,881
-2 RECREATION	294		0	0	0
-3 WILDLIFE	14		41	0	3
-4 FISHERIES	0		0	0	0
-5 GRAZING	0		30	0	2
-6 SOILS	0		0	0	0
-7 WATER	0		5,396	0	35
TOTAL POSITIVE EFFECTS	617	8	33,880	4,642	3,921
NEGATIVE EFFECTS					
-1 TIMBER	0		0	0	0
-2 RECREATION	0		0	0	0
-3 WILDLIFE	0		0	0	0
-4 FISHERIES	0		0	0	0
-5 GRAZING	0		0	0	0
-6 SOILS	0		0	0	0
-7 WATER	0		0	0	0
TOTAL NEGATIVE EFFECTS	0	0	0	0	0
TOTAL PRESENT BENEFITS	617	8	33,880	4,642	3,921
=====					
II. PRESENT VALUE OF COSTS					
-1 TIMBER	456	108	13,568	2,937	6,930
-2 RECREATION	2		0	0	0
-3 WILDLIFE	0		95	0	0
-4 FISHERIES	0		0	0	0
-5 GRAZING	0		76	0	3
-6 SOILS	0		0	0	0
-7 WATER	0		0	0	0
- ROADS	0	22	3,239	37	1,153
TOTAL PRESENT COSTS	458	130	16,978	2,974	8,086
=====					
III. PRESENT NET VALUE (PNV)					
-1 PNV for Timber Only	(147)	(122)	11,606	1,668	(4,202)
TOTAL PNV FOR ALL RESOURCES	159	(122)	16,902	1,668	(4,165)

NOTE: Missing values represent information that either cannot be quantified
or is not available.

APPENDIX C
ECONOMIC INFORMATION BY NATIONAL FOREST
FISCAL YEAR 1993
(^{'000} of dollars)

	Lassen	Los Padres	Mendocino	Modoc	Six Rivers
I. PRESENT VALUE OF BENEFITS					
POSITIVE EFFECTS					
-1 TIMBER	59,839	14	1,490	18,444	11,799
-2 RECREATION	0			0	0
-3 WILDLIFE	438		0	13	0
-4 FISHERIES	41			0	0
-5 GRAZING	0		0	110	2
-6 SOILS	0			0	0
-7 WATER	60			1,069	0
TOTAL POSITIVE EFFECTS	60,378	14	1,490	19,636	11,801
NEGATIVE EFFECTS					
-1 TIMBER	0			0	0
-2 RECREATION	0			0	0
-3 WILDLIFE	0				0
-4 FISHERIES	0				0
-5 GRAZING	0			0	0
-6 SOILS	0				0
-7 WATER	0			0	0
TOTAL NEGATIVE EFFECTS	0	0	0	0	0
TOTAL PRESENT BENEFITS	60,378	14	1,490	19,636	11,801
II. PRESENT VALUE OF COSTS					
-1 TIMBER	18,318	201	3,720	7,935	8,561
-2 RECREATION	0			0	0
-3 WILDLIFE	303			38	141
-4 FISHERIES	23			0	105
-5 GRAZING	0		0	98	20
-6 SOILS	0			0	0
-7 WATER	0			0	88
-- ROADS	1,193		180	1,727	969
TOTAL PRESENT COSTS	19,837	201	3,900	9,798	9,884
III. PRESENT NET VALUE (PNV)					
-1 PNV for Timber Only	40,328	(187)	(2,410)	8,782	2,269
TOTAL PNV FOR ALL RESOURCE	40,541	(187)	(2,410)	9,838	1,917

NOTE: Missing values represent information that either cannot be quantified or is not available.

APPENDIX C
ECONOMIC INFORMATION BY NATIONAL FOREST
FISCAL YEAR 1993
(^{'000} of dollars)

	Plumas	San Bernadino	Sequoia	Shasta- Trinity	Sierra
I. PRESENT VALUE OF BENEFITS					
POSITIVE EFFECTS					
-1 TIMBER	55,912	173	9,896	31,624	17,179
-2 RECREATION	0		556	0	
-3 WILDLIFE	0		364	173	
-4 FISHERIES	0			0	
-5 GRAZING	227		14	2	
-6 SOILS	0		371	0	
-7 WATER	2,976		187	330	706
TOTAL POSITIVE EFFECTS	59,115	173	11,388	32,129	17,885
NEGATIVE EFFECTS					
-1 TIMBER	0				
-2 RECREATION	0				
-3 WILDLIFE	0				
-4 FISHERIES	0				
-5 GRAZING	0				
-6 SOILS	0				
-7 WATER	0				
TOTAL NEGATIVE EFFECTS	0	0	0	0	0
TOTAL PRESENT BENEFITS	59,115	173	11,388	32,129	17,885
=====					
II. PRESENT VALUE OF COSTS					
-1 TIMBER	37,538	527	5,200	9,938	9,201
-2 RECREATION	0		11	0	20
-3 WILDLIFE	0			0	143
-4 FISHERIES	0			0	82
-5 GRAZING	269		16	3	41
-6 SOILS	0			0	
-7 WATER	0			0	123
- ROADS	4,749	3	911	1,247	1,293
TOTAL PRESENT COSTS	42,556	530	6,138	11,188	10,903
=====					
III. PRESENT NET VALUE (PNV)					
-1 PNV for Timber Only	13,625	(357)	3,785	20,439	6,685
TOTAL PNV FOR ALL RESOURCE	16,559	(357)	5,250	20,941	6,982

NOTE: Missing values represent information that either cannot be quantified
or is not available.

APPENDIX C
ECONOMIC INFORMATION BY NATIONAL FOREST
FISCAL YEAR 1993
(‘000 of dollars)

	Stanislaus	Tahoe	Lake Tahoe Basin	Regional Totals
I. PRESENT VALUE OF BENEFITS				
POSITIVE EFFECTS				
-1 TIMBER	18,558	16,758	127	279,066
-2 RECREATION	0			850
-3 WILDLIFE	0			1,046
-4 FISHERIES	0			41
-5 GRAZING	2	3		392
-6 SOILS	0			371
-7 WATER	21	138		10,918
TOTAL POSITIVE EFFECTS	18,581	16,899	127	292,684
NEGATIVE EFFECTS				
-1 TIMBER				0
-2 RECREATION				0
-3 WILDLIFE				0
-4 FISHERIES				0
-5 GRAZING				0
-6 SOILS				0
-7 WATER				0
TOTAL NEGATIVE EFFECTS	0	0	0	0
TOTAL PRESENT BENEFITS	18,581	16,899	127	292,684
=====				
II. PRESENT VALUE OF COSTS				
-1 TIMBER	11,992	11,966	878	149,974
-2 RECREATION				33
-3 WILDLIFE		161		881
-4 FISHERIES		15		225
-5 GRAZING	3	2		531
-6 SOILS		29		29
-7 WATER		88		299
- ROADS	3,181	1,045	39	20,988
TOTAL PRESENT COSTS	15,176	13,306	917	172,960
=====				
III. PRESENT NET VALUE (PNV)				
-1 PNV for Timber Only	3,385	3,747	(790)	108,104
TOTAL PNV FOR ALL RESOURCE	3,405	3,593	(790)	119,724

NOTE: Missing values represent information that either cannot be quantified
or is not available.

Appendix D **Employment, Income, and Program Level** **by National Forest** **Fiscal Year 93**

DESCRIPTION	Angeles	Cleveland	Eldorado	Inyo	Klamath
I. EMPLOYMENT AND INCOME INFORMATION					
-1 Timber Related Employment (jobs)	10	10	1170	100	270
-2 Employment Related Income (\$000)	\$440	\$440	\$51,480	\$4,400	\$11,880
-3 Fed Income Tax Generated (\$000)	\$60	\$60	\$7,720	\$660	\$1,780
II. TIMBER PROGRAM INFORMATION					
-1 Volume Offered (MMBF)	0.3	0.5	159.8	10.5	30.6
-2 Volume Sold & Awarded (MMBF)	0.3	0.4	124.9	8.4	32.5
-3 Volume Harvested (MMBF)					
-Sawtimber	0.0	0.0	86.0	4.0	13.5
-Roundwood	0.0	0.0	0.0	0.0	0.1
-Firewood	0.3	0.3	6.4	4.3	3.2
-Other	0.0	0.0	5.0	0.0	5.9
Total Harvest Volume	0.3	0.3	97.4	8.4	22.7
-4 Total Area Harvested (acres)	474	0	9,241	2,067	1,976
-5 Free Use Firewood (MMBF)	0.0	0.0	0.0	0.0	0.5
-6 Nonconvertible Products					
-Christmas Trees Cut (trees)	0	0	0	210	12,950
-Other Products Removed (\$000)	\$5	\$1	\$2	\$0	\$13
-7 Regeneration Treatment (acres)	391	57	2,260	151	5,855
-8 Timber Stand Improvement (acres)	729	204	9,329	550	6,723
III. FOREST ROAD INFORMATION					
-1 Road Construction (miles)					
-Appropriated Const.	0	0	0	0	0
-Purchaser Credit Const.	0	0	24	0	4
Total Construction	0	0	24	0	4
-2 Road Reconstruction (miles)					
-Appropriated Reconst.	0	0	0	0	1
-Purchaser Credit Reconst.	0	0	47	0	23
Total Reconstruction	0	0	47	0	24

Notes: "\$000" denotes Thousands of Dollars

"MMBF" denotes Millions of Board Feet

Some Volume "Sold: may have been "offered" in the previous fiscal year

Bold, large numbers indicate changes from the Washington Office Report due to more recent data.

Appendix D

Employment, Income, and Program Level by National Forest Fiscal Year 93

DESCRIPTION	Lassen	Los Padres	Mendocino	Modoc	Six Rivers
I. EMPLOYMENT AND INCOME INFORMATION					
-1 Timber Related Employment (jobs)	1020	10	90	470	500
-2 Employment Related Income (\$000)	\$44,880	\$440	\$3,960	\$20,680	\$22,000
-3 Fed Income Tax Generated (\$000)	\$6,730	\$60	\$590	\$3,100	\$3,300
II. TIMBER PROGRAM INFORMATION					
-1 Volume Offered (MMBF)	110.0	0.3	1.8	25.9	3.7
-2 Volume Sold & Awarded (MMBF)	112.2	0.3	4.8	53.6	5.4
-3 Volume Harvested (MMBF)					
-Sawtimber	66.2	0.0	3.6	34.4	33.3
-Roundwood	1.6	0.0	0.0	0.0	0.1
-Firewood	5.4	0.3	0.9	2.3	2.2
-Other	12.0	0.0	2.8	2.3	6.3
Total Harvest Volume	85.1	0.3	7.3	39.0	41.9
-4 Total Area Harvested (acres)	53,242	0	214	177	27
-5 Free Use Firewood (MMBF)	0.0	0.0	0.0	0.8	1.9
-6 Nonconvertible Products					
-Christmas Trees Cut (trees)	13,550	0	1,584	1,330	6,722
-Other Products Removed (\$000)	\$0	\$0	\$0	\$0	\$6
-7 Regeneration Treatment (acres)	3,041	103	2,299	1,633	2,022
-8 Timber Stand Improvement (acres)	7,737	121	4,297	6,394	1,632
III. FOREST ROAD INFORMATION					
-1 Road Construction (miles)					
-Appropriated Const.	0	0	0	0	0
-Purchaser Credit Const.	0	0	1	6	0
Total Construction	0	0	1	6	0
-2 Road Reconstruction (miles)					
-Appropriated Reconst.	0	0	0	0	0
-Purchaser Credit Reconst.	34	0	2	0	0
Total Reconstruction	34	0	2	0	0

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"MMBF" denotes Millions of Board Feet

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Appendix D

Employment, Income, and Program Level by National Forest

Fiscal Year 93

DESCRIPTION	Plumas	San Bernardino	Sequoia	Shasta-Trinity	Sierra
I. EMPLOYMENT AND INCOME INFORMATION					
-1 Timber Related Employment (jobs)	1060	40	560	880	780
-2 Employment Related Income (\$000)	\$46,640	\$1,760	\$24,640	\$38,720	\$34,320
-3 Fed Income Tax Generated (\$000)	\$7,000	\$260	\$3,700	\$5,810	\$5,150
II. TIMBER PROGRAM INFORMATION					
-1 Volume Offered (MMBF)	104.2	2.6	37.6	53.5	65.8
-2 Volume Sold & Awarded (MMBF)	84.6	2.5	50.4	31.2	50.2
-3 Volume Harvested (MMBF)					
--Sawtimber	66.6	0.0	40.2	60.3	53.8
--Roundwood	0.0	0.0	0.0	0.3	0.0
--Firewood	6.7	4.1	3.5	4.2	4.7
--Other	14.8	0.1	2.6	8.7	6.4
Total Harvest Volume	88.2	4.2	46.3	73.4	64.9
-4 Total Area Harvested (acres)	14,992	0	25,392	4,215	637
-5 Free Use Firewood (MMBF)	0.8	0.0	0.0	4.2	0.0
-6 Nonconvertible Products					
--Christmas Trees Cut (trees)	10,008	0	1,320	10,462	3,881
--Other Products Removed (\$000)	\$1	\$2	\$0	\$1	\$0
-7 Regeneration Treatment (acres)	4,289	308	4,296	7,211	2,686
-8 Timber Stand Improvement (acres)	2,585	777	7,151	13,435	7,152
III. FOREST ROAD INFORMATION					
-1 Road Construction (miles)					
--Appropriated Const.	0	0	0	0	0
--Purchaser Credit Const.	2	0	3	6	3
Total Construction	2	0	3	6	3
-2 Road Reconstruction (miles)					
--Appropriated Reconst.	0	0	0	0	0
--Purchaser Credit Reconst.	33	0	15	14	51
Total Reconstruction	33	0	15	14	51

Notes: "\$000" denotes Thousands of Dollars

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Appendix D

Employment, Income, and Program Level by National Forest Fiscal Year 93

DESCRIPTION	Stanislaus	Tahoe	Lake Tahoe Basin	Regional Totals
I. EMPLOYMENT AND INCOME INFORMATION				
-1 Timber Related Employment (jobs)	1200	470	30	8670
-2 Employment Related Income (\$000)	\$52,800	\$20,680	\$1,320	\$381,480
-3 Fed Income Tax Generated (\$000)	\$7,920	\$3,100	\$200	\$57,200
II. TIMBER PROGRAM INFORMATION				
-1 Volume Offered (MMBF)	79.5	63.6	18.7	768.8
-2 Volume Sold & Awarded (MMBF)	79.3	47.8	3.7	692.5
-3 Volume Harvested (MMBF)				
--Sawtimber	81.4	33.1	0.5	576.9
--Roundwood	0.0	0.0	0.0	2.3
--Firewood	6.2	2.9	2.6	60.5
--Other	12.0	2.9	0.1	81.8
Total Harvest Volume	99.6	38.9	3.2	721.5
-4 Total Area Harvested (acres)	5,441	5,984	91	124,170
-5 Free Use Firewood (MMBF)	0.0	0.2	0.0	8.4
-6 Nonconvertible Products				
--Christmas Trees Cut (trees)	0	3,263	0	65,280
--Other Products Removed (\$000)	\$1	\$0	\$0	\$35
-7 Regeneration Treatment (acres)	5,785	3,687	415	46,489
-8 Timber Stand Improvement (acres)	5,638	5,063	330	79,847
III. FOREST ROAD INFORMATION				
-1 Road Construction (miles)				
--Appropriated Const.	0	0	0	0
--Purchaser Credit Const.	9	8	0	67
Total Construction	9	8	0	67
-2 Road Reconstruction (miles)				
--Appropriated Reconst.	0	4	0	5
--Purchaser Credit Reconst.	30	64	0	312
Total Reconstruction	30	67	0	317

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APPENDIX E
TIMBER COMMODITY COMPONENT
Timber Sale Revenues and Expenses

Region 5
Fiscal Year 1993
(in thousands of dollars, except as noted)

Timber Commodity Program Component

<u>National Forest</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Net Revenue</u>	<u>MMBF /1 Harvest</u>
Angeles	0	7	-7	0.0
Cleveland	0	1	-1	0.0
Eldorado	6,693	3,804	2,888	31.4
Inyo	1,037	495	542	5.4
Klamath	1,550	3,624	-2,073	11.3
Lassen	14,748	3,664	11,084	45.2
Los Padres	0	0	0	0.0
Mendocino	1,202	1,972	-770	4.3
Modoc	7,813	2,277	5,537	19.2
Six Rivers	10,533	5,823	4,710	39.5
Plumas	12,455	7,431	5,025	49.9
San Bernardino	0	2	-2	0.0
Sequoia	9,520	4,780	4,740	43.0
Shasta-Trinity	17,181	8,312	8,869	57.7
Sierra	13,107	5,710	7,398	45.6
Stanislaus	17,508	9,209	8,300	92.2
Tahoe	7,258	6,198	1,060	32.5
Lake Tahoe Basin	0	0	0	0.0
Regional Total	120,605	70,634	49,971	477.0

/1 MMBF = Millions of Board Feet

APPENDIX E
FOREST STEWARDSHIP COMPONENT
Timber Sale Revenues and Expenses

Region 5
Fiscal Year 1993
(in thousands of dollars, except as noted)

Forest Stewardship Program Component

<u>National Forest</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Net Revenue</u>	<u>MMBF /1 Harvest</u>
Angeles	4	42	-37	0.03
Cleveland	2	3	-2	0.01
Eldorado	17,441	3,976	13,465	60.1
Inyo	6	10	-4	0.2
Klamath	1,200	2,592	-1,392	8.2
Lassen	2,698	1,900	798	33.5
Los Padres	0	2	-2	0.0
Mendocino	107	879	-772	2.1
Modoc	2,396	1,553	843	16.2
Six Rivers	145	101	44	0.5
Plumas	2,778	3,512	-734	30.2
San Bernardino	56	227	-172	1.2
Sequoia	9	3	6	0.03
Shasta-Trinity	4,929	1,390	3,539	10.6
Sierra	3,111	1,530	1,581	14.8
Stanislaus	171	130	41	1.5
Tahoe	870	595	275	3.4
Lake Tahoe Basin	111	723	-613	2.1
Regional Total	36,034	22,055	13,979	185.0

/1 MMBF = Millions of Board Feet

APPENDIX E
PERSONAL USE COMPONENT
Timber Sale Revenues and Expenses

Region 5
Fiscal Year 1993
(in thousands of dollars, except as noted)

Personal Use Program Component

<u>National Forest</u>	<u>Revenues</u>	<u>Expenses</u>	<u>Net Revenue</u>	<u>MMBF /1 Harvest</u>
Angeles	18	466	-448	0.3
Cleveland	7	122	-115	0.3
Eldorado	114	391	-277	5.9
Inyo	34	156	-121	2.8
Klamath	68	1,000	-932	3.2
Lassen	95	395	-300	6.8
Los Padres	14	225	-211	0.3
Mendocino	22	430	-408	0.9
Modoc	20	152	-131	1.6
Six Rivers	53	372	-319	1.9
Plumas	71	944	-874	8.1
San Bernardino	117	624	-507	3.0
Sequoia	67	318	-252	3.3
Shasta-Trinity	113	695	-582	5.2
Sierra	47	465	-418	4.5
Stanislaus	71	515	-443	5.9
Tahoe	80	517	-437	2.9
Lake Tahoe Basin	17	355	-338	1.1
Regional Total	1,025	9,029	-8,004	58.0

/1 MMBF = Millions of Board Feet

National Forests in Region 5 USDA Forest Service

